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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,141	03/19/2004	Isao Saito	250557US-2CONT	6370
22850	7590	05/04/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			STAFIRA, MICHAEL PATRICK	
			ART UNIT	PAPER NUMBER

2877

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/804,141

Applicant(s)

SAITO, ISAO

Examiner

Michael P. Stafira

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 12 is/are rejected.
- 7) ☒ Claim(s) 5 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/19/04.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

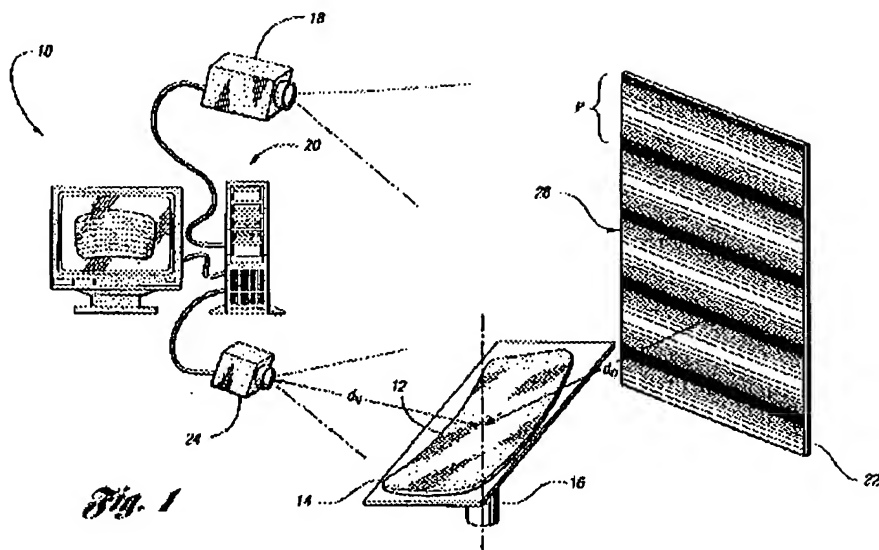
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-10, 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Ladewski ('990).

#### **Claim 1**

Ladewski ('990) discloses a step of irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with light from a patterned light source (Fig. 1, Ref. 18, 26)(Col. 2, lines 34-38); a step of picking up an image (Fig. 1, Ref. 24)(Col. 2, lines 50-60) of the object (Fig. 1, Ref. 12) to be inspected; a step of analyzing (Fig. 1, Ref. 20) the image to extract a reflected image of the light source (Col. 2, lines 62-67); and a step of performing a good/defective judgment of the shape of the object to be inspected based on the result of comparing data regarding the extracted reflected image with data regarding the reflected image from a good product which is registered in advance (Col. 3, lines 13-30).



### Claim 2

Ladewski ('990) further discloses a step of irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with light from a patterned light source (Fig. 1, Ref. 18, 26)(Col. 2, lines 34-38); a step of picking up an image (Fig. 1, Ref. 24)(Col. 2, lines 50-60) of the object (Fig. 1, Ref. 12) to be inspected; a step of analyzing (Fig. 1, Ref. 20) the image to extract a reflected image of the light source (Col. 2, lines 62-67); a step of calculating the position of the reflected image of the light source in a horizontal plane; a step of comparing the calculated position with the position regarding a good product which is registered in advance; and a step of performing a good/defective judgment of the shape of the object to be inspected based on the result of the comparison (Col. 3, lines 2-12; Col. 5, lines 13-55).

### Claim 3

Ladewski ('990) further discloses a step of irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with light from a patterned light source (Fig. 1, Ref. 18, 26)(Col. 2, lines 34-38); a step of picking up an image (Fig. 1, Ref. 24)(Col. 2, lines 50-60) of the object (Fig. 1, Ref.

Art Unit: 2877

12) to be inspected; a step of analyzing (Fig. 1, Ref. 20) the image to extract a reflected image of the light source (Col. 2, lines 62-67); a step of calculating the position of the reflected image of the light source; a step of calculating the gradient of the object to be inspected based on the position of the reflected image of the light source; and a step of performing a good/defective judgment of the shape of the object to be inspected based on the result of comparing reference gradient data which is prepared in advance, with the obtained gradient of the surface of the object to be inspected (Col. 6, lines 27-67).

**Claim 4**

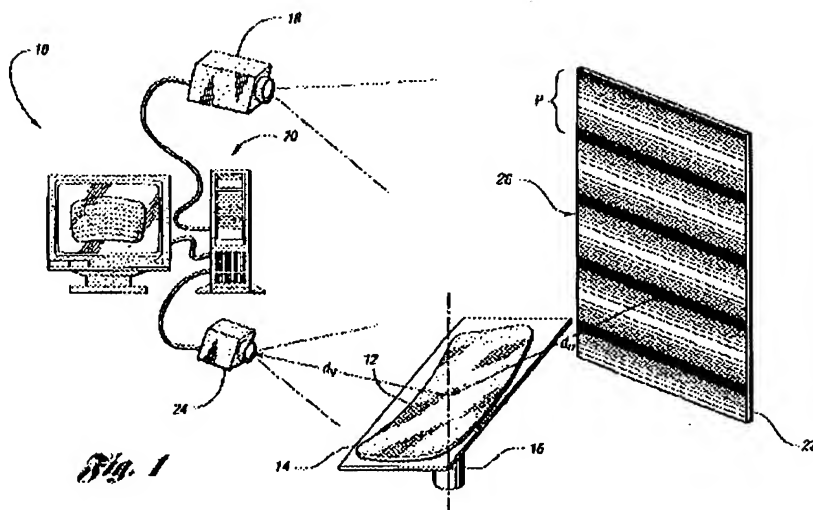
Ladewski ('990) further discloses a step of irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with light from a patterned light source (Fig. 1, Ref. 18, 26)(Col. 2, lines 34-38); a step of picking up an image (Fig. 1, Ref. 24)(Col. 2, lines 50-60) of the object (Fig. 1, Ref. 12) to be inspected; a step of analyzing (Fig. 1, Ref. 20) the image to extract a reflected image of the light source (Col. 2, lines 62-67); a step of calculating the position of the reflected image of the light source; a step of calculating the height distribution of the surface of the object to be inspected based on the position of the reflected image of the light source; and a step of performing a good/defective judgment of the shape of the object to be inspected based on the result of comparing reference height distribution data which is prepared in advance, with the calculated height distribution of the surface of the object to be inspected (Col. 6, lines 52-60).

**Claim 6**

Ladewski ('990) further discloses the object to be inspected is a curved glass sheet to be employed as a window glass of automobiles (Col. 2, lines 26-33).

**Claim 7**

Ladewski ('990) discloses a light source (Fig. 1, Ref. 18) for irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with patterned light 9Fig. 1, Ref. 1); a camera (Fig. 1, Ref. 24) for picking up an image of the object 9Fig. 1, Ref. 12) to be inspected; and a controller (Fig. 1, Ref. 20) for analyzing the image to extract a reflected image of the light source and performing a good/defective judgment of the shape of the object to be inspected based on the result of comparing data regarding to the extracted reflected image with data regarding to the reflected image from a good product which is registered in advance (Col. 3, lines 13-30; Col. 10, lines 4-14).



#### Claim 8

Ladewski ('990) discloses a light source (Fig. 1, Ref. 18) for irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with patterned light (Fig. 1, Ref. P); a camera (Fig. 1, Ref. 24) for picking up an image of the object to be inspected; and a controller (Fig. 1, Ref. 20) for analyzing the image to extract a reflected image of the light source, calculating the position of the reflected image of the light source in a horizontal plane, comparing the calculated position with the position regarding a good product which is registered in advance, and performing a

Art Unit: 2877

good/defective judgment of the shape of the object to be inspected based on the result (Col. 3, lines 2-12; Col. 5, lines 13-55).

#### **Claim 9**

Ladewski ('990) discloses a light source (Fig. 1, Ref. 18) for irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with patterned light (Fig. 1, Ref. P); a camera (Fig. 1, Ref. 24) for picking up an image of the object to be inspected; and a controller (Fig. 1, Ref. 20) for analyzing the image to extract a reflected image of the light source, calculating the position of the reflected image of the light source, calculating the gradient of the surface of the object to be inspected based on the position of the reflected image of the light source, and performing a good/defective judgment of the shape of the object to be inspected based on the result of comparing reference gradient data which is prepared in advance, with the calculated gradient of the surface of the object to be inspected (Col. 6, lines 27-67).

#### **Claim 10**

Ladewski ('990) discloses a light source (Fig. 1, Ref. 18) for irradiating a surface of an object (Fig. 1, Ref. 12) to be inspected with patterned light (Fig. 1, Ref. P); a camera (Fig. 1, Ref. 24) for picking up an image of the object to be inspected; and a controller (Fig. 1, Ref. 20) for analyzing the image to extract a reflected image of the light source, calculating the position of the reflected image of the light source, calculating the height distribution of the surface of the object to be inspected based on the position of the reflected image of the light source, and performing a good/defective judgment of the shape of the object to be inspected based on the result of comparing reference height distribution data which is prepared in advance, with the calculated height distribution of the surface of the object to be inspected (Col. 6, lines 52-60).

Art Unit: 2877

## Claim 12

Ladewski ('990) further discloses the object to be inspected is a curved glass sheet to be employed as a window glass of automobiles (Col. 2, lines 24-34).


### *Allowable Subject Matter*

3. Claims 5, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Michael P. Stafira



Application/Control Number: 10/804,141  
Art Unit: 2877

Page 8

Primary Examiner  
Art Unit 2877

April 20, 2005